

实验研究报道

α 1,3 FucT-VII基因转染对人结肠癌LOVO细胞的作用

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摘要

目的 观察 α 1,3 FucT-VII基因转染对人LOVO细胞的生物学行为的改变 方法 采用RT-PCR和Western blot方法检测转染前后LOVO细胞中 α 1,3 FucT-VII基因的表达, CCK-8法检测细胞增殖, 流式细胞术分析细胞周期, 并通过体外迁移、侵袭实验检测转染前后LOVO细胞运动侵袭能力的变化。结果 LOVO细胞微弱表达 α 1,3 FucT-VII, RT-PCR和Western blot方法验证转染后的LOVO/FucT-VII高表达 α 1,3 FucT-VII。转染后细胞生长增快, S期细胞增多而G1期细胞减少, 细胞趋化性迁移和侵袭能力增强。结论 α 1,3 FucT-VII基因能改变人结肠癌LOVO细胞的生物学行为, 增强细胞趋化性迁移和侵袭等转移表型。

关键词 [结直肠癌](#); [\$\alpha\$ 1,3 FucT-VII基因](#); [糖基转移酶](#)

分类号

The effects of α 1,3 FucT-VII gene transfection on human colon cancer cell line LOVO

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Abstract

Objective To investigate the effect of α 1,3 FucT-VII gene transfection on human colon cancer cell line LOVO. Methods Expression of the α 1,3 FucT-VII mRNA and protein were measured by RT-PCR and Western blot. Cell proliferation was measured by CCK-8 assay. Cell cycle was analyzed by flow cytometry. The alteration of LOVO cells metastatic potential before and after α 1,3 FucT-VII gene transfection were assayed by cell chemotactic migration and invasion. Results α 1,3 FucT-VII was weakly expressed in human colon cancer cell line LOVO. The expression of α 1,3 FucT-VII in transfected LOVO cells was detected by RT-PCR and Western Blot methods. The proliferation of cells was increased after transfection with more cells in S period and less in G1 period. The cell chemotactic migration and invasion were enhanced after α 1,3 FucT-VII gene transfection. Conclusions α 1,3 FucT-VII gene promotes cell proliferation and metastatic potential of LOVO cells.

Key words [colorectal cancer](#) [\$\alpha\$ 1,3 FucT-VII gene](#) [chemotactic migration](#) [chemotactic invasion](#)

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